STATE OF MARYLAND

DHMH

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April 20, 2012

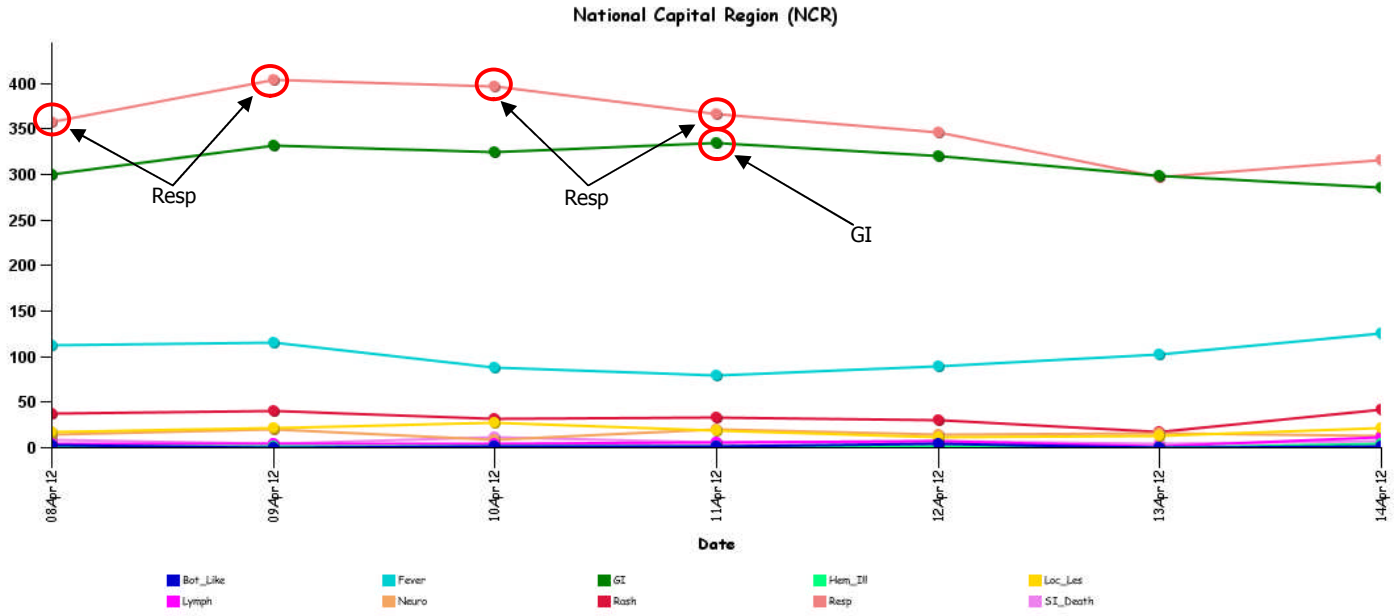
Public Health & Emergency Preparedness Bulletin: # 2012:15
Reporting for the week ending 04/14/12 (MMWR Week #15)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: **No Active Alerts**
Maryland: **Level One (MEMA status)**

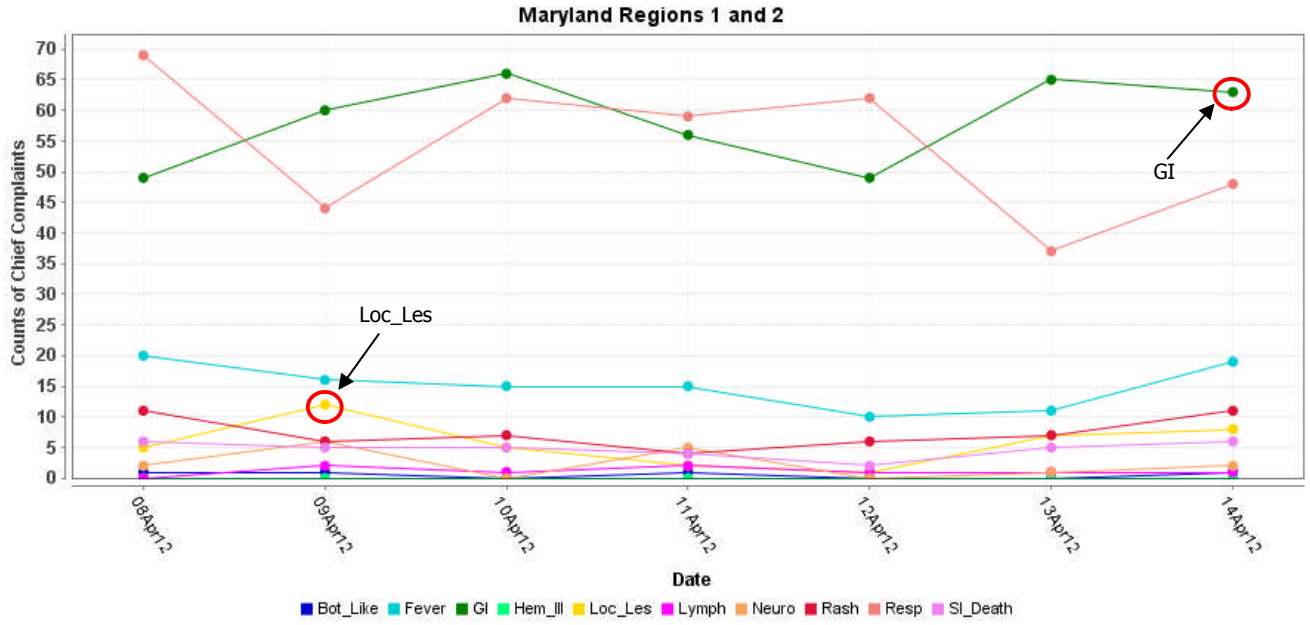
SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

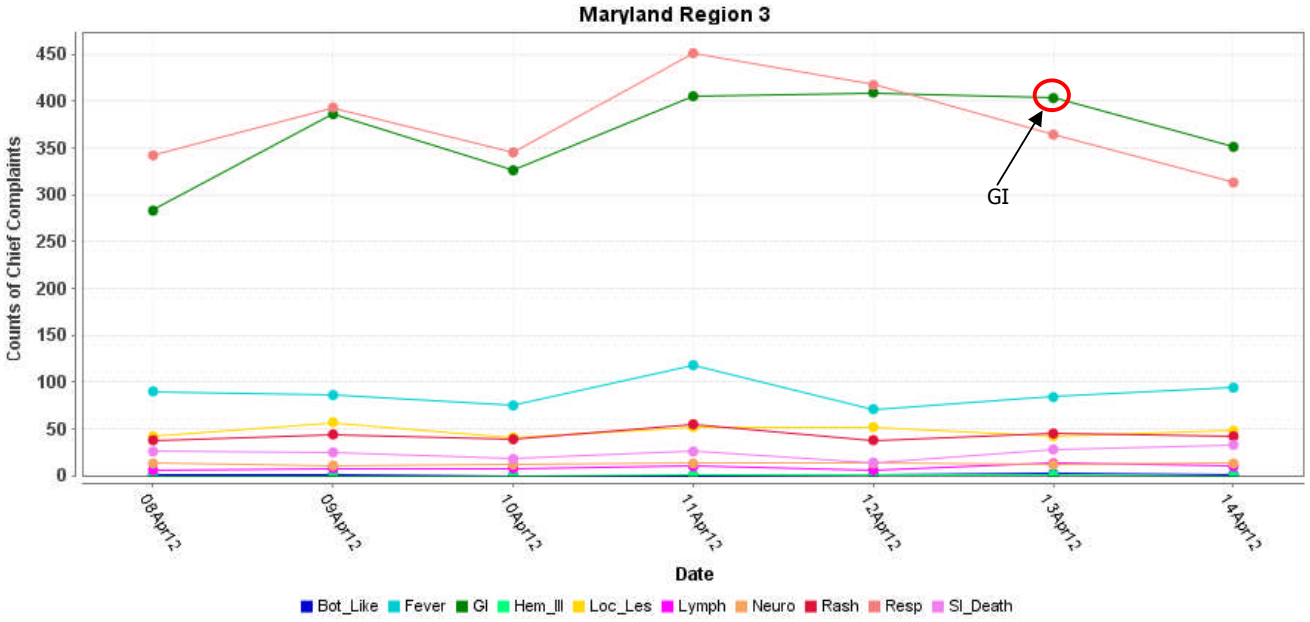


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

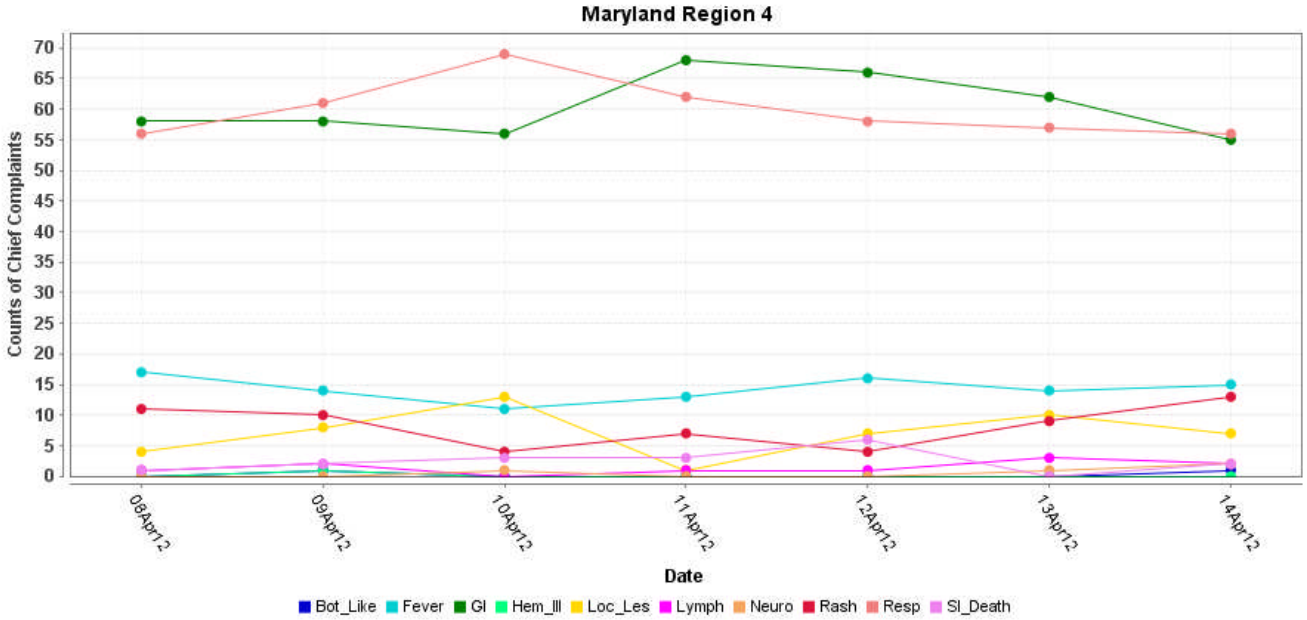
MARYLAND ESSENCE:



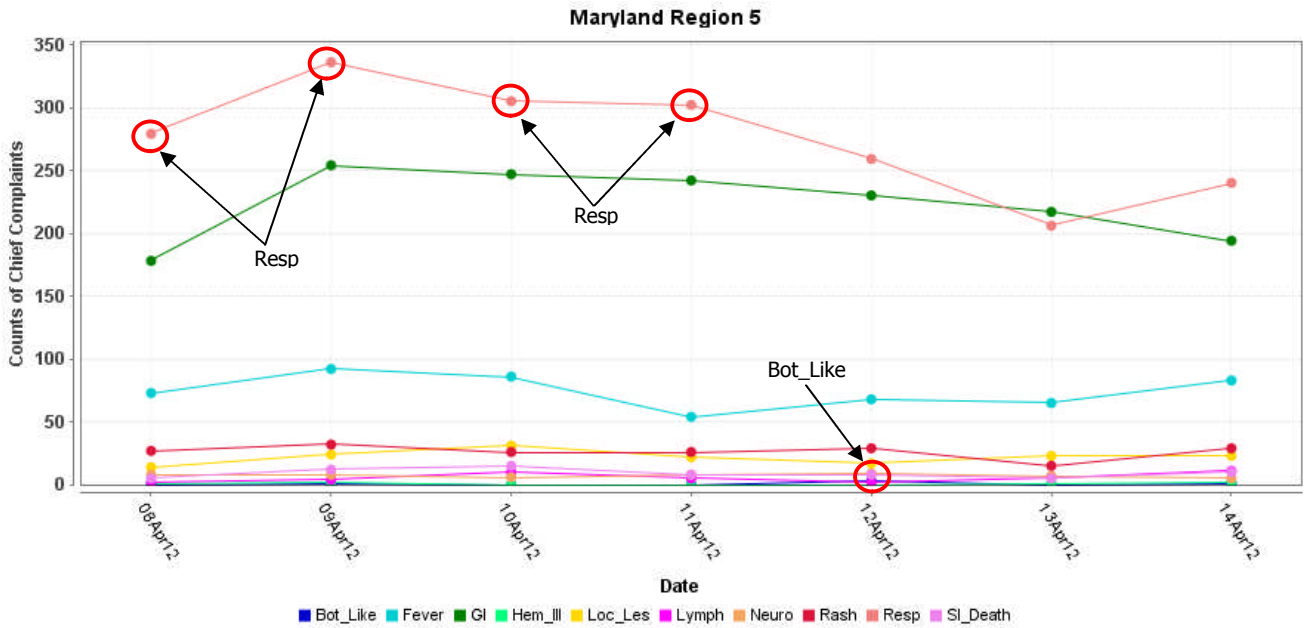
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



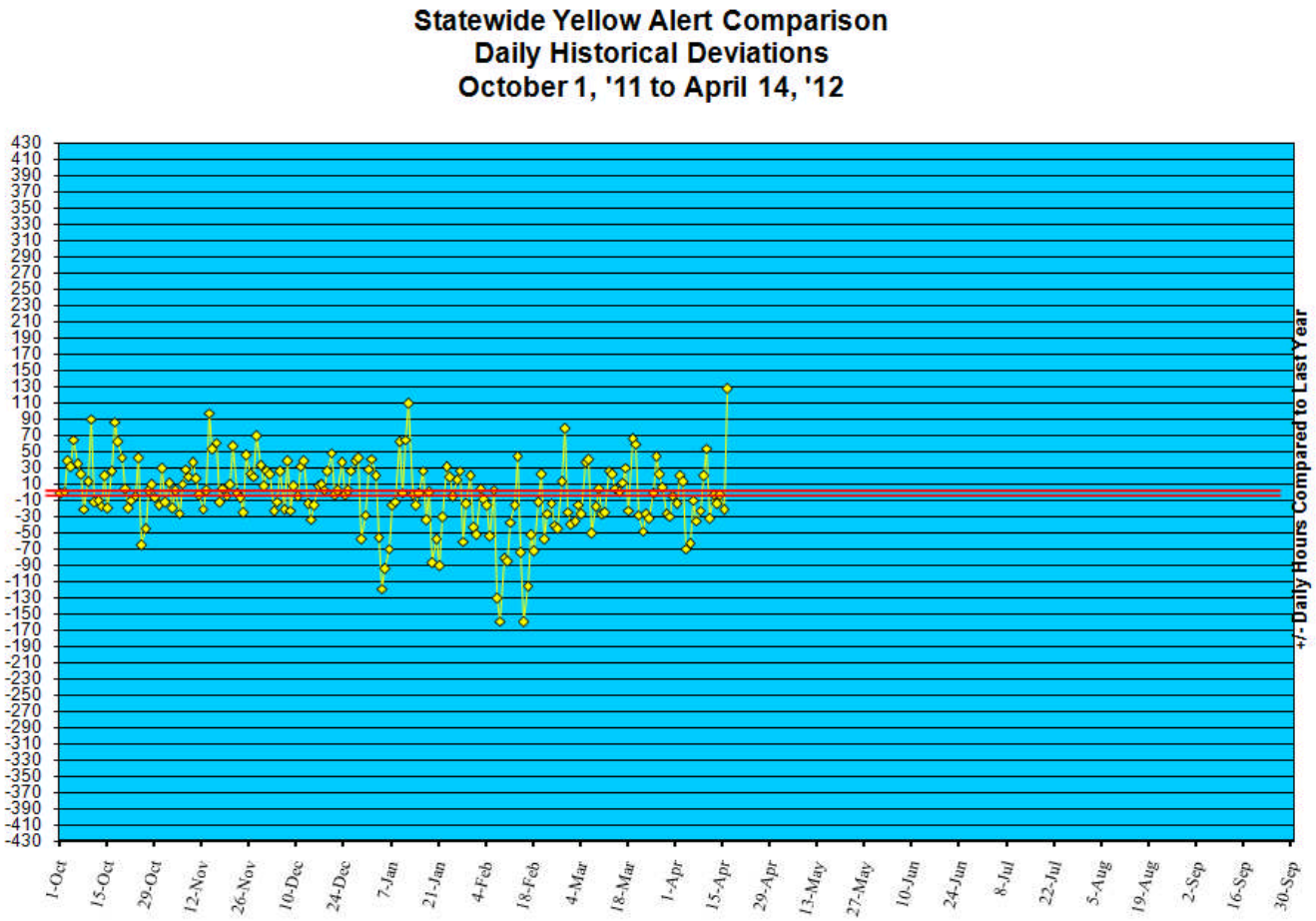
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in February 2012 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (April 8 – April 14, 2012):	8	0
Prior week (April 1 – April 7, 2012):	8	0
Week#15, 2011 (April 9 – April 15, 2011):	7	0

3 outbreaks were reported to DHMH during MMWR Week 15 (April 8-14, 2012)

1 Gastroenteritis outbreak
1 outbreak of GASTROENTERITIS in a Nursing Home

2 Respiratory illness outbreaks
1 outbreak of ILI/PNEUMONIA in a Nursing Home
1 outbreak of ILI/PNEUMONIA in an Assisted Living Facility

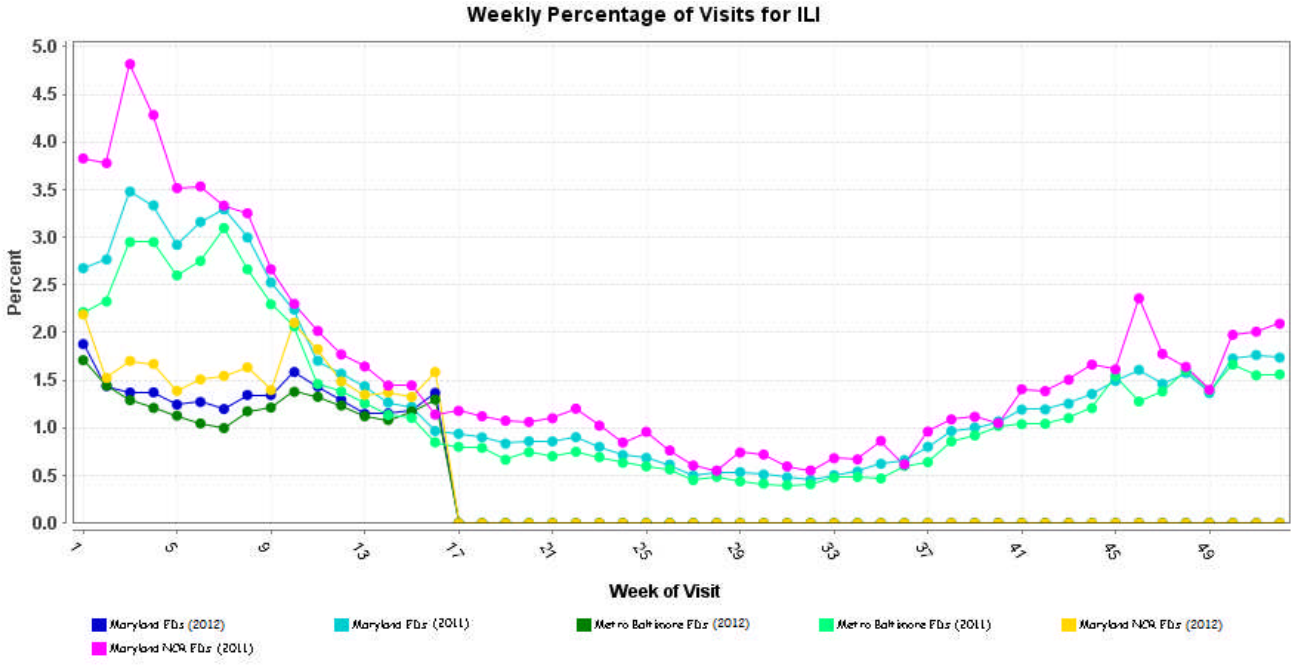
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 15 was: Sporadic Activity, Minimal Intensity.

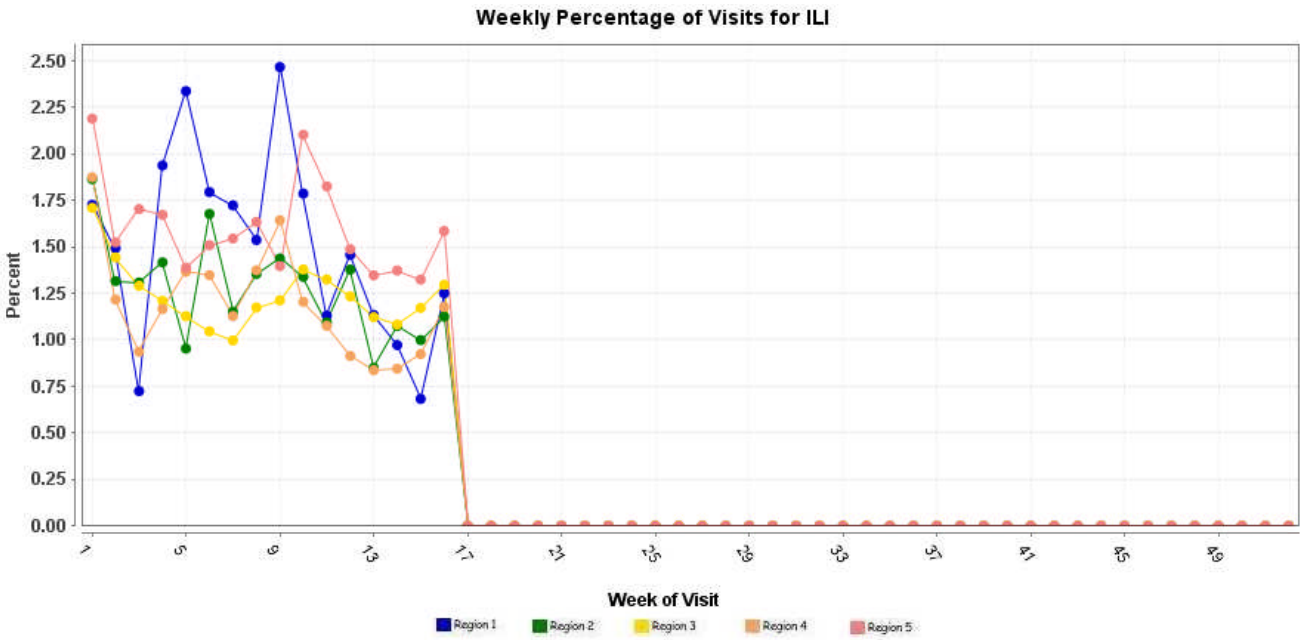
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



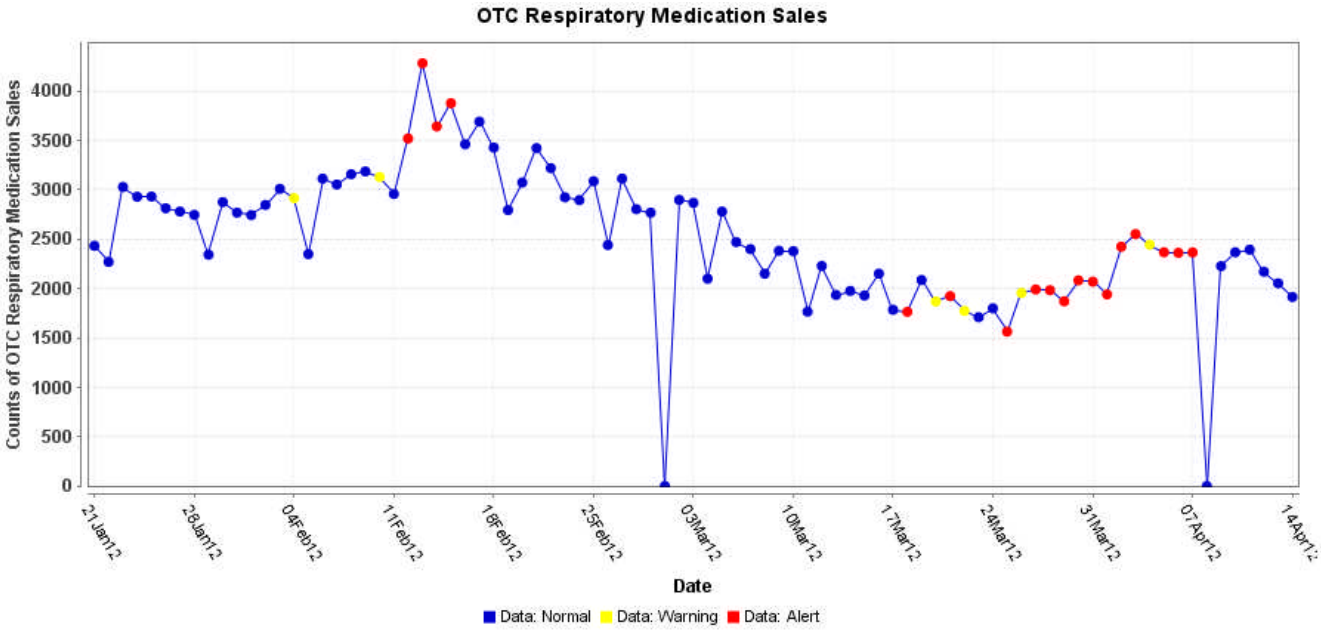
* Includes 2011 and 2012 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2012 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of April 12, 2012, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 602, of which 355 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA, HUMAN (EGYPT): 12 April 2012, The Ministry of Health and Population of Egypt has notified WHO of a new case of human infection with avian influenza A (H5N1) virus. The case is a 36-year-old female from Giza governorate. She developed symptoms on 1 Apr 2012 and was admitted to a hospital on 7 Apr 2012 and died on the same day. The case was confirmed by the Central Public Health Laboratories, a National Influenza Center of the WHO Global Influenza Surveillance Network. Epidemiological investigations into the source of infection indicate that the case had exposure to backyard poultry. Of the 167 cases confirmed to date in Egypt, 60 have been fatal.

NATIONAL DISEASE REPORTS

E. COLI EHEC (OREGON): 14 April 2012, The Oregon Public Health Division, Department of Agriculture and several local health departments are investigating an outbreak of E. coli O157:H7 infections that have left 3 Portland-area children hospitalized, 2 with kidney failure, all of whom drank raw milk from the same small farm, officials said Friday, 13 Apr 2012. 3 of the 4 children with laboratory-confirmed infections have been hospitalized. All of the children consumed raw unpasteurized milk obtained from Foundation Farm in Clackamas County. The farm has voluntarily ceased its milk distribution. The investigation is ongoing, officials said. Customers of this small farm's milk are being notified to discard their milk. Others who may have raw milk from this farm should not drink this milk and should dispose of the milk, they said. 2 of the hospitalized children, all of whom are under the age of 15, have developed hemolytic uremic syndrome, a type of kidney failure [and a known complication of this infection]. Other customers of this dairy are reporting recent diarrhea and other symptoms typical of E. coli O157 infections. "Raw milk can carry harmful bacteria that can make you very sick or kill you. Pasteurized milk has many health benefits. Raw milk is not any healthier than pasteurized milk and can carry illness-causing bacteria," said Katrina Hedberg, M.D., M.P.H., Oregon Public Health Division state epidemiologist. Public health officials advise against drinking unpasteurized milk. While it is possible to get foodborne illnesses from many different foods, raw milk is one of the riskiest of all, according to the CDC. Milk from Foundation Farm and raw cow's milk in general is not allowed to be sold in retail stores in Oregon. The dairy only distributed to 48 households that were part of a herd-share, in which people contract to take ownership of a portion of a herd or individual animals. State and local public health officials in Clackamas, Washington and Multnomah counties are investigating these cases, including interviewing customers and family members of those infected. Officials are advising that any containers, surfaces or other items that may have come in contact with this milk or other products from this farm should be cleaned and sanitized with bleach or other disinfectants. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS, SEROTYPE BAREILLY (USA): 12 April 2012, A total of 116 individuals infected with the outbreak strain of Salmonella [enterica serotype] Bareilly have been reported from 20 states and the District of Columbia. The 16 new cases are from Florida (1), Georgia (1), Illinois (1), Maryland (1), Massachusetts (4), Missouri (1), New York (1), Pennsylvania (2), Rhode Island (1), and Wisconsin (3). Among 100 persons for whom information is available, illness onset dates range from 28 Jan 2012 to 31 Mar 2012. Ill persons range in age from 4 to 78 years, with a median age of 31. 50 percent of patients are female. Among 71 persons with available information, 12 (17 percent) reported being hospitalized. No deaths have been reported. Illnesses that occurred after 14 Mar 2012, might not be reported yet due to the time it takes between when a person becomes ill and when the illness is reported. The investigation has not conclusively identified a food source. The investigation is ongoing into individual food items and their sources. CDC and FDA are working together on the investigation and will provide updates as soon as they are available. If a specific food source is identified for this outbreak, public health officials will alert the public and take further steps to prevent additional illnesses. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

E. COLI EHEC (MISSOURI): 09 April 2012, A total of 5 cases of E. coli O157:H7 infection have been confirmed in Central Missouri, according to Margaret Donnelly, director of the Missouri Department of Health & Senior Services. The source of the infections has not been identified, according to the health advisory issued by the department. The investigation is ongoing. Of the case patients, a 17-month-old child and a 2-year-old child, have developed hemolytic uremic syndrome (HUS), the severe and life-threatening complication of E. coli infection that can result in permanent kidney damage, according to the health department report. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS

FOODBORNE ILLNESS, FATAL (EL SALVADOR): 08 April 2012, Chalchuapa Hospital attended 11 people with symptoms of poisoning after consuming contaminated with poison tamales. Two children were killed on Thursday after consuming a contaminated or poisoned tamales in Canton Township, Coco Chalchuapa, Santa Ana. Another 11 people, including 8 children, were poisoned by food consumption between 5 and 6 pm that day. Those affected were admitted to emergency in the National Hospital Chalchuapa. The director of the hospital, Walter Flores, confirmed the deaths of 2 children, a 9 year old and an 11 year old. The 2 children died on the way to the village of El Coco, which is about 10 miles from the hospital. According to Flores, neither child had vital signs at admission. "Nothing could be done for them," he said. After the children, there were 11 other people who showed

symptoms of poisoning, the doctors on duty explained. Most of them had difficulty breathing, sweating and salivation. "Five of the patients with the greater severity were transported to San Juan de Dios Hospital in Santa Ana, and another 2 had severe cases of intoxication," said the director of the health center. One patient, a 22 year old was moved to the intensive care unit (ICU) in Santa Ana, Beatriz Adriana Esquivel, confirmed Santaneco. At first, when doctors interviewed relatives of intoxicated people coming from the cantons El Coco and Galeano, they had consumed one common food: tamales made that evening at the home of a person, who was also intoxicated. The police were alerted by doctors of massive contamination, as reported by the speakers located in the community who do not eat tamales because of the risk. On Thursday afternoon the hostess and with 3 other women prepared food typical of the area, known as ticucos, made with cornmeal boiled in ash, and refried beans wrapped in banana leaf. Some of the collection also had chicken in the tamales, as replacement for the beans. That evening about 50 tamales were cooked. The owner began to distribute food among family and friends. Left home for 27. "She used to make tamales like this because there is no cooking on Good Friday. When the tamales are ready they are distributed." said one of the relatives. At 5:30 pm the host served 2 tamales to her grandson and saved 2 for herself. Minutes earlier he had delivered 12 tamales to a neighbor who had come to help prepare the tamales. Of that community there were at least 8 people were poisoned. Although research is not yet confirmed the cause of the poisoning, it is presumed that the tamales were prepared at the same table where the host had previously had been agricultural poison, which was used to kill tacuacines coming to eat their chickens. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable